



## Commercial Satellite Survivability

### Issue Background

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Industry and the Government are increasingly relying upon the satellite infrastructure for data, voice, and video communications and services. The national security and homeland security communities also use satellites for critical activities such as military support, intelligence gathering, and disaster preparedness. The Government uses satellite communications not only nationally, but also globally. While the satellite infrastructure is recognized by the *Homeland Security Act of 2002* as a critical infrastructure, a Federal program does not exist to ensure national security and emergency preparedness (NS/EP) communications via satellites.

### History of NSTAC Actions

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At its first formal meeting on December 14, 1982, the President's National Security Telecommunications Advisory Committee (NSTAC) established the Commercial Satellite Survivability (CSS) Task Force to assess the vulnerability of the commercial satellite communications network and enhancements to the NS/EP telecommunications infrastructure that the use of commercial carrier satellites and Earth terminals could provide. In addition, the task force was asked to review a set of satellite initiatives selected for implementation and develop an implementation concept. The CSS Task Force's investigations resulted in the definition of 12 initiatives for improving the survivability and robustness of commercial satellite communications resources. The investigations also resulted in the incorporation of the CSS Program Office, established in November 1984.

The NSTAC's Industry Executive Subcommittee (IES) reactivated the CSS Task Force in June 1988 to review the proposed objectives and implementation initiatives of the Commercial SATCOM Interconnectivity (CSI) Phase II Architecture and offer recommendations. In March 1990, the NSTAC concluded that the CSI Phase II Architecture approach was reasonable, and it recommended the Government: (1) include Ku-band assets in the CSI program to provide "access"; (2) augment selected large Ku-band Earth stations and control facilities to provide Ku-band interoperability; (3) use very small aperture terminal technology to restore selected trunking between interexchange carrier switches and local exchange carrier end offices, and selected users in the United States to access the public switched network via direct connection at an access tandem; and (4) pursue investigations, analyses, and augmentations necessary to ensure NS/EP telecommunications service can be extended from the United States to NS/EP users overseas. The NSTAC also approved several specific recommendations to the Government regarding the use and augmentation of satellite assets to achieve various types of connectivity.

### Recent NSTAC Activities

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On May 29, 2003, the IES formed the Satellite Task Force to: (1) examine how industry and the Government can work together to address vulnerabilities in the satellite infrastructure and collaborate on potential mitigating efforts; and (2) determine if foreign ownership of satellites is an impediment to the security of the satellite infrastructure. The task force will work in coordination with representatives from the National Security Council to identify policy changes that should be made to bring the satellite infrastructure into conformance with a standard for mitigating vulnerabilities.